THE FALSE SPIDER MITE GENUS PSEUDOLEPTUS BRUYANT (Acarina: Phytoptipalpidae¹) Edward W. Baker² and A. Earl Pritchard³

The genus *Pseudoleptus* Bruyant (1911) was proposed for a grass-feeding mite in Uruguay. The original description was inaccurate, and certain other mites that feed on monocotyledonous plants have been erroneously assigned to the genus.

Through the kindness of Mr. C. S. Carbonell of Montevideo, Uruguay, topotypes of *Pseudoleptus arechavaletae*, the type of the genus, have been obtained. It is the purpose of this paper to redescribe this species and to recharacterize the genus.

Genus PSEUDOLEPTUS Bruyant

Pseudoleptus Bruyant, 1911, Zool. Anz., 38: 340; Oudemans, 1928. Ent. Ber.,
7: 287; Vitzthum, 1942, Klass. Ordn. Tierr. 5(Abt. 4, Buch 5): 812;
Sayed 1942, Bull. Soc. Fouad ler Ent., 26: 81; McGregor, 1949, Mem.
S. Califor. Acad. Sci., 3(2): 1; Baker, 1949, Amer. Midl. Nat., 42: 353;
Radford, 1950, Union Internatl. Sci. Biol. (Sér. C), 1: 80. Type—
Pseudoleptus arechavaletae Bruyant; monotypic.

Trichadenus, Oudemans, 1938 (not Rondani, 1870), Tijd. Ent., 81: LXXV., Misidentification.

Oudemans (1928) included in *Pseudoleptus* certain species that properly belong to the genus *Dolichotetranychus* Sayed, and Vitzthum (1942) and Radford (1950) considered *Dolichotetranychus* to be a synonym of *Pseudoleptus*. Sayed (1942) showed that the two genera are distinct; however, the palpal and tarsal characters given for *Pseudoleptus* were inaccurate.

Oudemans (1938) considered *Pseudoleptus* to be a synonym of *Trichadenus* Rondani. The writers concur with Sayed (1942), however, that *Trichadenus* cannot be recognized with certainty on the basis of the original description alone. Moreover, the type of *Trichadenus* was found on mulberry, and *Pseudoleptus* is known only from salt grass.

Pseudoleptus resembles Pentamerismus McGregor, Aegyptobia Sayed, and Phytoptipalpus Trägårdh in that the palpus is five segmented, a condition that is not found in other phytoptipalpid

¹Considered by various authors as the Pseudoleptidae, Trichadenidae, or Tenuipalpidae. The genus Phytoptipalpus, however, was first used as the basis for a suprageneric name.

²U. S. Department of Agriculture, Bureau of Entomology and Plant Quarantine, Washington, D. C.

³University of California, Berkeley.



Fig. 1. Pseudoleptus arechavaletae, female, dorsal aspect.

genera. *Pseudoleptus* differs from *Pentamerismus* and *Aegyptobia* in that the female has the hysterosoma subdivided by transverse striae and lacks a ventral plate (a plate bearing the pair of setae located just anterior to the genital plate). It differs from *Phytoptipalpus* principally in that the adult possesses four pairs of legs.

Palpus 5 segmented. Adult with 4 pairs of legs. Rostral shield present, narrow and bifurcate. Body of female elongate-elliptical, the metapodosoma and opisthosoma separated by transverse striae. Integument with fine striae. Propodosoma with 3 pairs of dorsal setae; metapodosoma with 2 transverse rows of 6 dorsal setae each; opisthosoma with a pair of mid-dorsal setae anteriorly and with 5 dorsolateral setae on either side. Female with genital plate present; ventral and anal plates absent; with 3 pairs of anal setae. Male with 4 pairs of genito-anal setae.

The genus *Pseudoleptus* contains a single species.

PSEUDOLEPTUS ARECHAVALETAE BRUYANT

(Figs. 1-3)

Pseudoleptus arechavaletae Bruyant, 1911, Zool. Anz., 38: 340. Cotypes: larvae, nymphs, males, and females, Uruguay, on Distichlis scoparia; possibly at the University of Lille, France.

Tenuipalpus haumani Lahille, 1927, Rev. Univ. Buenos Aires (ser. 2), 24: 1295. Cotypes: females, Argentina, on *Distichlis spicata*; possibly at the University of Buenos Aires. New synonymy.

Female---Rostrum reaching to end of femur I. Palpus with two setae and a sensory peg on distal segment. Legs I and II with the femora, genua, and tibiae each with the dorsal seta slender and somewhat longer than width of segment; tarsi I and II each with a sensory peg, posterodistally; tarsi III and IV without sensory pegs; claw with hook absent. Rostral shield strongly bifurcate, the lobes narrow and divergent and reaching the distal end of trochanter I. Propodosoma dorsally with longitudinal, solid striations; dorsal propodosomals setiform and minutely serrate, the anterior pair about onehalf as long as distance between them. Metapodosoma dorsally nearly smooth except for transverse striae of strictures anteriorly and posteriorly; dorsal metapodosomals similar to dorsal propodosomals but smaller. Opisthosoma dorsally with caudolaterally diverging, solid striae; dorsolateral opisthosomals five in number, the third and fourth considerably longer than the first, second, and fifth. Podosoma ventrally with solid, longitudinal striae in intercoxal areas, with transverse, dotted striae in wide median area; anterior and posterior pairs of medioventral metapodosomals very short. Opisthosoma ventrally with transverse, dotted striae anteriorly and with semilongitudinal, solid striae laterally and posteriorly; genital plate smooth, with 2 pairs of setae. Length of body 290 u, including rostrum 343 u; greatest width of body 166 *u*.

Male.—Tarsi I and II each with a single sensory peg as in female. Rostral shield reaching to middle of trochanter I. Propodosoma dorsally similar to female. Metapodosoma dorsally with semilongitudinal, solid striae; opisthosoma dorsally with transverse striae anteriorly and semi-longitudinal, solid striae behind dorsocentrals. Podosoma ventrally similar to female.



Fig. 2. Pseudoleptus arechavaletae, female, ventral aspect.



Fig. 3. Pseudoleptus arechavaletae, male, dorsal aspect.

Opisthosoma ventrally with transverse, dotted striae; medioventrals located near middle. Length of body 223 u, including rostrum 266 u, greatest width of body 133 u.

Specimens examined are from Canelon Chico, Canelones, Uruguay, April 4, 1910 (from C. S. Carbonell), on *Distichlis scoparia*.

The figures of *Tenuipalpus haumani* that were presented with the original description clearly indicate that this species belongs to the genus *Pseudoleptus*. *Haumani* was described without reference to *arechavaletae*, and no characters were given to separate the two species. The similarity of the geographic location and hosts indicates that they are synonymous.

LITERATURE CITED

BAKER EDWARD W.

1949. The genus Brevipalpus (Acarina: Pseudoleptidae). The American Midland Naturalist, 42(2): 350-402. (September.)

BRUYANT, L.

1911. Pseudoleptus arechavaletae n. gen., n. sp., nouvel acarien chéletine de l'Urguay. Zoologische Anzeiger, 38: 340-345.

LAHILLE, F.

1927. Nota sobre algunos ácaros del páis. Revista de la Universidad de Buenos Aires (ser. 2), 24: 1286-1304.

McGregor, E. A.

1949. Nearctic mites of the family Pseudoleptidae. Memoirs of the Southern California Academy of Sciences, 3(2): 1-45. (March.)

Oudemans, A. C.

1928. Acarologische Aateekeningen LXXXIX. Entomologische Berichten, 7: 285-293.

1938. Nieuwe vondsten op het gebied der Systematick en der Nomenclatuur der Acari II. Tijdschrift voor Entomologie, 81: LXX-LXXX.

RADFORD, CHARLES D.

1950. Systematic check list of mite genera and type species. Union International des Sciences Biologiques (Série C), 1: 1-232.

SAYED, M. TAHER

1942. Contribution to the knowledge of the Acarina of Egypt: I. The genus Roaiella Hirst [Pseudotetranychinae - Tetranychidae]. Bulletin de la Société Fouad 1er d'Entomologie, 26: 81-91.

VITZTHUM, HERMANN GRAF

1942. Acarina. In Bronns, Klassen and Ordnugen des Tierreichs, 5 (Abteilung 4, Buch 5): 301-912.

THE ALOE APHID, ALOEPHAGUS MYERSI ESSIG

(Homoptera)

E. O. Essig

University of California, Berkeley

The apterous form of this very interesting introduced aphid was described in the Pan-Pacific Entomologist, Vol. XXVI, No. 1, pp. 22-24, Figs. 1-2, 1950. At the time the original specimens were collected no alate individuals were available. Fortunately, Mr. L. E. Myers, for whom the species was named, recently sent me a considerable number of both alate and winged forms collected on *Aloe* at La Cañada, Los Angeles County, California on February 8, 1951 by W. D. Dyer. A description of the alate forms and an illustration of the same follow.

Alate viviparous parthenogenetic female (fig. 1). Color mostly black excepting the abdomen which is dull greenish with black markings as shown